

**Amendments to and listing of the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-15. (Canceled)

16. (Previously Presented) A computer-implemented method of creating a virtual traffic network representing traffic conditions on a road system, the method comprising:

- (a) inputting into a processor map data representing a road system, the road system being defined by a plurality of links;
- (b) inputting into the processor flow data related to traffic flow on the road system;
- (c) inputting into the processor information about traffic events obtained from different sources than sources of the flow data, including information that correlates the traffic events to specific links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data; and
- (d) the processor integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual traffic network indicates both the flow data and the traffic event information, the traffic event information being integrated by using the specific links on the road system that the traffic events are correlated to.

17. (Original) The method of claim 16 wherein the flow data is real-time flow data, the virtual traffic network representing real-time traffic conditions on the road system.

18. (Original) The method of claim 16 wherein the flow data is input from a plurality of road sensors.

19. (Original) The method of claim 16 wherein step (a) further comprises customizing the map data to define locally known features of the road system.

20. (Previously Presented) The method of claim 16 wherein one of the traffic events are incidents and the information includes information related to incidents on the road system.

21. (Previously Presented) The method of claim 16 wherein the map data, the flow data and the information have a synaptic relationship with each other.

22. (Original) The method of claim 16 wherein the virtual traffic network is spatially oriented.

23-80. (Canceled)

81. (Previously Presented) An article of manufacture for creating a virtual traffic network representing traffic conditions on a road system, the article of manufacture comprising a computer-readable medium encoded with computer-executable instructions for performing a method comprising:

- (a) inputting into a processor map data representing a road system, the road system being defined by a plurality of links;
- (b) inputting into the processor flow data related to traffic flow on the road system;
- (c) inputting into the processor information about traffic events obtained from different sources than sources of the flow data, including information that correlates the traffic events to specific of the links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data; and
- (d) the processor integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual traffic network indicates both the flow data and the traffic event information, the traffic event information being integrated by using the specific links on the road system that the traffic events are correlated to.

82. (Previously Presented) The article of manufacture of claim 81 wherein the flow data is real-time flow data, the virtual traffic network representing real-time traffic conditions on the road

system.

83. (Previously Presented) The article of manufacture of claim 81 wherein the flow data is input from a plurality of road sensors.

84. (Previously Presented) The article of manufacture of claim 81 wherein step (a) further comprises customizing the map data to define locally known features of the road system.

85. (Previously Presented) The article of manufacture of claim 81 wherein one of the traffic events are incidents and the information includes information related to incidents on the road system.

86. (Previously Presented) The article of manufacture of claim 81 wherein the map data, the flow data and the information have a synaptic relationship with each other.

87. (Previously Presented) The article of manufacture of claim 81 wherein the virtual traffic network is spatially oriented.

88. (Previously Presented) A computer-implemented apparatus for creating a virtual traffic network representing traffic conditions on a road system, the apparatus comprising:

- (a) means for inputting into a processor map data representing a road system, the road system being defined by a plurality of links;
- (b) means for inputting into the processor flow data related to traffic flow on the road system;
- (c) means for inputting into the processor information about traffic events obtained from different sources than sources of the flow data, including information that correlates the traffic events to specific of the links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data; and
- (d) means for integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual

traffic network indicates both the flow data and the traffic event information, the traffic event information being integrated by using the specific links on the road system that the traffic events are correlated to.

89. (Previously Presented) The apparatus of claim 88 wherein the flow data is real-time flow data, the virtual traffic network representing real-time traffic conditions on the road system.

90. (Previously Presented) The apparatus of claim 88 wherein the flow data is input from a plurality of road sensors.

91. (Previously Presented) The apparatus of claim 88 wherein the means for inputting into a processor map data representing a road system further comprises means for customizing the map data to define locally known features of the road system.

92. (Previously Presented) The apparatus of claim 88 wherein one of the traffic events are incidents and the information includes information related to incidents on the road system.

93. (Previously Presented) The apparatus of claim 88 wherein the map data, the flow data and the information have a synaptic relationship with each other.

94. (Previously Presented) The apparatus of claim 88 wherein the virtual traffic network is spatially oriented.

95. (Previously Presented) The method of claim 16 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

96. (Previously Presented) The method of claim 16 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

97. (Previously Presented) The method of claim 16 wherein step (c) is performed by a human operator.

98. (Previously Presented) The method of claim 16 further comprising:

(e) graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information, the graphical display showing the flow data and the traffic event information on a map representing the virtual traffic network, the traffic event information being integrated into the map by using the specific links on the road system that the traffic events are correlated to.

99. (Previously Presented) The article of manufacture of claim 81 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

100. (Previously Presented) The article of manufacture of claim 81 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

101. (Previously Presented) The article of manufacture of claim 81 wherein step (c) is performed by a human operator inputting the traffic event information into a user interface display screen.

102. (Previously Presented) The article of manufacture of claim 81 wherein the computer-readable medium is encoded with computer-executable instructions for performing a method further comprising:

(e) graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information, the graphical display showing the flow data and the traffic event information on a map representing the virtual traffic network, the traffic event information being integrated into the map by using the specific links on the road system that the traffic events are correlated to.

103. (Previously Presented) The apparatus of claim 88 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

104. (Previously Presented) The apparatus of claim 88 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

105. (Previously Presented) The apparatus of claim 88 wherein the means for inputting is a user interface display screen that receives the traffic event information from a human operator.

106. (Previously Presented) The apparatus of claim 88 further comprising:

(e) means for graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information, the graphical display showing the flow data and the traffic event information on a map representing the virtual traffic network, the traffic event information being integrated into the map by using the specific links on the road system that the traffic events are correlated to.

107. (New) The method of claim 16 wherein at least some of the traffic information inputted into the processor about a traffic event is correlated to a plurality of links on the road system, and the virtual traffic network represents that the plurality of links are affected by the traffic event correlated to the plurality of links.

108. (New) The article of manufacture of claim 81 wherein at least some of the traffic information inputted into the processor about a traffic event is correlated to a plurality of links on the road system, and the virtual traffic network represents that the plurality of links are affected by the traffic event correlated to the plurality of links.

109. (New) The apparatus of claim 88 wherein at least some of the traffic information inputted into the processor about a traffic event is correlated to a plurality of links on the road system, and

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Reply to Office Action of April 18, 2008

the virtual traffic network represents that the plurality of links are affected by the traffic event correlated to the plurality of links.